

**THE EMBODIMENTS OF THE INVENTION IN WHICH AN EXCLUSIVE PROPERTY OR PRIVILEGE IS CLAIMED ARE DEFINED AS FOLLOWS:**

1. A combination product for use in the treatment of cancer in a mammal, said combination product comprising: an antisense oligonucleotide of between 7 and 100 nucleotides in length comprising at least 7 consecutive nucleotides complementary to a mammalian ribonucleotide reductase R2 subunit mRNA and one or more immunotherapeutic agents.
2. The combination product according to claim 1, wherein said mammalian ribonucleotide reductase R2 subunit mRNA is a human ribonucleotide reductase R2 subunit mRNA.
3. The combination product according to claim 2, wherein said human ribonucleotide reductase R2 subunit mRNA has a sequence as set forth in SEQ ID NO:105.
4. The combination product according to claim 2, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in any one of SEQ ID NOs:1 and 4-104.
5. The combination product according to claim 2, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:1.
6. The combination product according to any one of claims 1 to 5, wherein said antisense oligonucleotide comprises one or more phosphorothioate internucleotide linkages.
7. The combination product according to any one of claims 1 to 6, wherein said cancer is an advanced cancer.
8. The combination product according to any one of claims 1 to 7, wherein said cancer is a metastatic cancer.
9. The combination product according to any one of claims 1 to 8, wherein said treatment is a first-line systemic therapy.

10. The combination product according to any one of claims 1 to 9, wherein said one or more immunotherapeutic agents are non-specific immunotherapeutic agents.
11. The combination product according to any one of claims 1 to 9, wherein said one or more immunotherapeutic agents are specific immunotherapeutic agents.
12. The combination product according to any one of claims 1 to 10, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine, a non-cytokine adjuvant, a monoclonal antibody and a cancer vaccine.
13. The combination product according to any one of claims 1 to 10, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine and a non-cytokine adjuvant.
14. The combination product according to any one of claims 1 to 10, wherein said one or more immunotherapeutic agents are one or more cytokines.
15. The combination product according to any one of claims 1 to 14, wherein said combination product further comprises one or more chemotherapeutic agents.
16. The combination product according to any one of claims 1 to 15, wherein said cancer is a solid cancer.
17. The combination product according to any one of claims 1 to 16, wherein said mammal is a human.
18. A method of treating cancer in a mammal comprising administering to said mammal a combination product comprising:
  - (a) an antisense oligonucleotide of between 7 and 100 nucleotides in length comprising at least 7 consecutive nucleotides complementary to a mammalian ribonucleotide reductase R2 subunit mRNA, and
  - (b) one or more immunotherapeutic agents.
19. The method according to claim 18, wherein said mammalian ribonucleotide reductase R2 subunit mRNA is a human ribonucleotide reductase R2 subunit mRNA.

20. The combination product according to claim 19, wherein said human ribonucleotide reductase R2 subunit mRNA has a sequence as set forth in SEQ ID NO:105.
21. The method according to claim 19, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in any one of SEQ ID NOs:1 and 4-104.
22. The method according to claim 19, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:1.
23. The method according to any one of claims 18 to 22, wherein said antisense oligonucleotide comprises one or more phosphorothioate internucleotide linkages.
24. The method according to any one of claims 18 to 23, wherein said cancer is an advanced cancer.
25. The method according to any one of claims 18 to 24, wherein said cancer is a metastatic cancer.
26. The method according to any one of claims 18 to 25, wherein said combination product is administered to said mammal as first-line systemic therapy.
27. The method according to any one of claims 18 to 26, wherein said one or more immunotherapeutic agents are non-specific immunotherapeutic agents.
28. The method according to any one of claims 18 to 26, wherein said one or more immunotherapeutic agents are specific immunotherapeutic agents.
29. The method according to any one of claims 18 to 27, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine, a non-cytokine adjuvant, a monoclonal antibody and a cancer vaccine.
30. The method according to any one of claims 18 to 27, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine and a non-cytokine adjuvant.

31. The method according to any one of claims 18 to 27, wherein said one or more immunotherapeutic agents are one or more cytokines.
32. The method according to any one of claims 18 to 31, wherein said combination product further comprises one or more chemotherapeutic agents.
33. The method according to any one of claims 18 to 32, wherein said cancer is a solid cancer.
34. The method according to any one of claims 18 to 33, wherein said mammal is a human.
35. Use of an antisense oligonucleotide of between 7 and 100 nucleotides in length comprising at least 7 consecutive nucleotides complementary to a mammalian ribonucleotide reductase R2 subunit mRNA and one or more immunotherapeutic agents in the manufacture of a medicament for the treatment of cancer in a mammal.
36. The use according to claim 35, wherein said mammalian ribonucleotide reductase R2 subunit mRNA is a human ribonucleotide reductase R2 subunit mRNA.
37. The use according to claim 36, wherein said human ribonucleotide reductase R2 subunit mRNA has a sequence as set forth in SEQ ID NO:105.
38. The use according to claim 36, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in any one of SEQ ID NOs:1 and 4-104.
39. The use according to claim 36, wherein said antisense oligonucleotide comprises at least 7 consecutive nucleotides of the sequence as set forth in SEQ ID NO:1.
40. The use according to any one of claims 35 to 39, wherein said antisense oligonucleotide comprises one or more phosphorothioate internucleotide linkages.
41. The use according to any one of claims 35 to 40, wherein said cancer is an advanced cancer.

42. The use according to any one of claims 35 to 41, wherein said cancer is a metastatic cancer.
43. The use according to any one of claims 35 to 42, wherein said treatment is a first-line systemic therapy.
44. The use according to any one of claims 35 to 43, wherein said one or more immunotherapeutic agents are non-specific immunotherapeutic agents.
45. The use according to any one of claims 35 to 43, wherein said one or more immunotherapeutic agents are specific immunotherapeutic agents.
46. The use according to any one of claims 35 to 44, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine, a non-cytokine adjuvant, a monoclonal antibody and a cancer vaccine.
47. The use according to any one of claims 35 to 44, wherein said one or more immunotherapeutic agents are selected from the group of: a cytokine and a non-cytokine adjuvant.
48. The use according to any one of claims 35 to 44, wherein said one or more immunotherapeutic agents are one or more cytokines.
49. The use according to any one of claims 35 to 48, wherein said combination product further comprises one or more chemotherapeutic agents.
50. The use according to any one of claims 35 to 49, wherein said cancer is a solid cancer.
51. The use according to any one of claims 35 to 50, wherein said mammal is a human.
52. A pharmaceutical kit comprising a combination product for the treatment of cancer, said combination product comprising:
  - (a) an antisense oligonucleotide of between 7 and 100 nucleotides in length comprising at least 7 consecutive nucleotides complementary to a mammalian ribonucleotide reductase R2 subunit mRNA, and

(b) one or more immunotherapeutic agents.

53. A combination product for use in the treatment of renal cancer in a subject, said combination product comprising: an antisense oligonucleotide of between 7 and 100 nucleotides in length comprising at least 7 consecutive nucleotides complementary to SEQ ID NO:1 and one or more cytokines.

54. The combination product according to claim 53, wherein said one or more cytokines are selected from: interferon alpha and interleukin-2.

55. The combination product according to claim 53 or 54, wherein said treatment is a first-line systemic therapy.